

(h) The exterior of the equipment must have no sharp edges or projections. Means must be provided to fasten the EPIRB to a survival craft or person.

(i) The antenna must be deployable to its designed length and operating position in a foolproof manner. The antenna must be securely attached to the EPIRB and easy to de-ice. The antenna must be vertically polarized and omnidirectional.

[51 FR 31213, Sept. 2, 1986; 52 FR 35246, Sept. 18, 1987, as amended at 53 FR 8905, Mar. 18, 1988; 56 FR 11516, Mar. 19, 1991]

**§ 80.1055 Special requirements for Class B EPIRB stations.**

(a) A Class B EPIRB must meet the following:

(1) The EPIRB must be turned on automatically, as by water activated battery, or manually by an on-off switch. A positive means of turning the equipment off must be provided. Where an on-off switch is employed, a guard must be provided to prevent inadvertent operation;

(2) The equipment must be designed to be deployed, its controls actuated, or its antenna erected, each by a single action task which can be performed by either hand;

(3) Meet the requirements in §§ 80.1053(a) (4) through (8), (a)(14), and (c) through (i) of this part. EPIRBs with water activated batteries must, additionally, meet the requirements contained in §§ 80.1053 (a)(10) and (a)(11) of this part,

(4) Bear a designation that indicates it is a "Class B" EPIRB.

(b) A Class B EPIRB may have a manually activated test switch which meets the requirements in § 80.1053 (b) and (c).

(c) If testing of an EPIRB with Coast Guard coordination is not possible, brief operational tests are authorized provided the tests are conducted within the first five minutes of any hour and are not longer than three audio sweeps or one second whichever is longer.

[51 FR 31213, Sept. 2, 1986; 52 FR 35246, Sept. 18, 1987, as amended at 53 FR 8906, Mar. 18, 1988; 56 FR 11517, Mar. 19, 1991]

**§ 80.1057 Special requirements for Class C EPIRB stations.**

Class C EPIRB's shall not be manufactured, imported, or sold in the United States after February 1, 1995. Class C EPIRB stations installed on board vessels before February 1, 1995, may be used until February 1, 1999, and not thereafter.

(a) A Class C EPIRB must operate on the frequencies 156.750 and 156.800 MHz, must use G3N modulation, and employ the international Radiotelephone Two Tone Alarm signal. The EPIRB transmission must be cycled. Each cycle must consist of 6 periods (T1 to T6) as shown in the table below. During T1, T2, T3, and T5 the 156.750 MHz and 156.800 MHz carriers must be modulated alternately by a 2200 Hz and a 1300 Hz tone.

The modulating duration of each tone must be 250 milliseconds. The maximum tolerance of the frequency and modulating duration of each tone must be  $\pm 5$  percent. During T4 and T6 neither of the RF carriers must be emitted. The T4 and T6 time periods must be varied according to the predetermined schedule shown in the table below. After the last cycle the transmissions must be terminated. The EPIRB must be able to recycle its transmissions in accordance to the schedule shown in the table below by placing the activation switch to the "off" and then "on" position.

Period	Duration in seconds	Transmission frequency in MHz
T <sub>1</sub> .....	1.5 .....	156.800
T <sub>2</sub> .....	14.5 .....	156.750
T <sub>3</sub> .....	1.5 .....	156.800
T <sub>4</sub> .....	40.0 (16 cycles) .....	None.
T <sub>4</sub> .....	80.0 (32 cycles) .....	
T <sub>4</sub> .....	160.0 (64.2 cycles) .....	
T <sub>4</sub> .....	320.0 (83.2 cycles) .....	
T <sub>5</sub> .....	14.5 .....	156.750
T <sub>6</sub> .....	Same as T <sub>4</sub> duration .....	None.

(b) The effective radiated power must not be less than 1 watt. The power must be determined according to FCC Bulletin OCE 45. The EPIRB must meet the power requirements over each of the following temperature ranges for the time period shown below. Batteries may be replaced after completion of tests for each temperature range:

(1) 0 to +50 degrees Celsius for 24 hours continuous operation.

(2) -20 to 0 degrees Celsius for 12 hours continuous operation.